CPC NHC OPC WPC CCB Meeting Agenda 1730Z – 27 Apr 2017

I. <u>Enterprise Discussion</u>

A. Schedule of Events (SOE) Enterprise highlights, available online

❖ WCOSS:

- 1-day outage on April 27 of the Orlando system (Gyre/Surge) so the GSS/UP04 upgrade may be done.
- Single-cycle parallel production test on Gyre/Surge on May 1.

B. Upcoming Model Changes and additions – details are available online.

Model	30-day eval start	30-day eval end	Implementation Date
GFS	Dec. 13	Jan. 31	July 2017
NHC Guidance suite	Jan. 19	Feb. 18	May 24
RTMA/URMA	Feb. 16 Mar. 28	Mar. 18 Apr. 27	Mar. 28 May 2
HREF/HiResW	Mar. 29	Jun. 5**	Mid Sep. 2017

Red = not approved by NCEP Director

Blue = approved by NCEP Director

Black = not yet briefed to NCEP Director

The GFS upgrade has been approved by the NCEP Director. Implementation is now planned for July 2017.

- ❖ The RTMA/URMA upgrade will be implemented on May 2 at 1200Z. See the SCN at: http://www.nws.noaa.gov/os/notification/scn17-17rtma_urma_aaa.htm.
- **HREF/HiResW evaluation is longer than 30 days since it's the science evaluation run jointly by EMC and NCO. User feedback is due back to NCO by June 5.
- The GFDL Hurricane model will be discontinued effective with the GFS upgrade in July 2017. See the SCN at: http://www.nws.noaa.gov/os/notification/scn17-45discontinue_ghm_v2.htm

C. Proposed upcoming NCO RFC(s) with potential Enterprise effect:

- ❖ RFC #2972 Move and grow CPC partitions is expected to be completed by April 28. This work was begun but needs to be broken up into smaller pieces.
- ❖ RFC #3153 Move the NCEP traffic from the global routing table to the NCEP VRF instance. This is the last step to allow oneNWSnet traffic to be routed between Boulder/College Park to Reston/Orlando and exchange routes with existing networks (legacy OPSnet) cleanly. Connectivity between NCEP sites (College Park, Boulder, Reston, Orlando, MAX, NSOF, Silver Spring) will be intermittent for 5-10 min at the beginning of the implementation. External (public/internet/NOAA and Boulder NOC) access into the Boulder and College Park Data Centers will not be affected. Was to be implemented on April 11 at 1100Z; postponed to a date TBD.
- ❖ RFC #3189 Make changes to the iptables on the NHC systems on the 112 VLAN, to allow an NHC user to have SSH access from the nhcgis box to the nhcgisdev box. Was to be implemented on April 18 at 1600Z, postponed to April 28 at 1600Z due to the College Park Data Center switch issues that occurred on April 17.
- ❖ Upgrade the Data OnTAP OS of the College Park Phase 2 and Boulder NetApp filers to version 9.1. This is necessary to add the new 8080 filers to the clusters, to relieve the CPU load issues that have been occurring. This work will require failing traffic back and forth between the NetApp heads multiple times. There is a risk of brief outages of 2 minutes during this work. This will be mitigated by running as much as possible at the other site (i.e. run at Boulder during the College Park upgrades, and vice versa). Turning off less critical systems (i.e. dev or QA systems) in College Park may be necessary, to

reduce the load so that nastore5 and 6 are able to successfully be failed over to just one of that pair. Remote Center and NTWC VMs located in College Park and websites hosted for the remote Centers and NTWC may be impacted by this work. College Park will be upgraded first, on May 1 between 1400Z and 2000Z. Boulder will be upgraded at a later date.

- ❖ RFC #3206 Implement NAWIPS v7.4.0. This includes: updated NHC cone radii for 2017, NHC updates for 2017 (bug fixes, seasonal updates); fixed missing 2nd tier marine zone; SFMAP performance improvement; fixed PROB2CAT bugs that occurs while composing convective outlook and when lines are drawn outside the international boundaries; bug fix in the ensemble diagnostic function (ENS_CVAL); and other changes. A full list of changes will be provided upon request. Was to be implemented on April 25 at 1200Z; postponed due to CWD to May 2 (OPC at 1200Z, WPC, NESDIS, and the SDM at 1400Z, CPC at 2100Z).
- Modify DBNet on WCOSS to begin saving new UKMet Tropical Cyclone bulletins with the WMO ID 'WTNT82' instead of the legacy 'WTNT80' products, as requested by NHC. To be implemented on May 2 at 1300Z.
- Migrate NHC dependency off of NCOSRV onto IDP in College Park and Boulder in order to operationally support any apps in IDP. To be implemented on May 1 at 1100Z.
- Modify DBNet on WCOSS to send PSURGE data to NHC's new COOP machine. To be implemented on May 4 at 1630Z.
- Add pre-para HiResW grib data to the NetApp so that WPC may evaluate it before the HiResW upgrade. Changes will be made on WCOSS and on NCOSRV in College Park to enable this change. To be implemented on May 1 at 1330Z.
- Set up new data push on NCOSRV to get data produced by the local Centers to Boulder via NCODF1/2, to ensure that all data on the legacy College Park NetApp is duplicated in Boulder. The LDM will also be modified on IDP Boulder to write other datasets to disk as they become available. To be implemented on May 1 at 1500Z.
- Provide ssh access to cpcwebdev from RZDM, so that CPC may make backups and set up web staging. To be implemented on May 2 at 1400Z.
- Create mount points on CPC's VMs cpccf14-cpccf24 for GDAS data. GDAS data will be provided to these mount points from WCOSS. To be implemented on May 3 at 1400Z.

WCOSS decoder updates:

decod_dcgffd.v3.2.0:

The decod_dcgffd (fast-delivery wind/wave data) decoder is being modified to process data from the Jason-3 satellite and store it as a new subtype b031/xx127 in the NCEP observational database.

decod dcp3rd.v3.1.1:

The decod_dcp3rd decoder for tail doppler radar data is being modified to store the vertical height using BUFR mnemonic "FLVLST" instead of "HSMSL", because the latter isn't appropriate for aircraft data and also doesn't have the required precision for reports from Air Force G-IV reconnaissance jets.

decod dcncld.v3.1.0:

The decod_dcncld decoder for NASA Langley cloud pixel data is being modified to generate BUFR output for reports whenever the observed cloud phase value is non-missing, even if all other observed values are missing. Currently, the decoder will skip the report (not generate BUFR output) unless at least one of the other observed values is non-missing.

decod cdears.v3.4.0:

The decod_dcears decoder for EARS(EUMETSAT ATOVS Retransmission Services) is being modified to generate BUFR output for input BUFR messages containing extra "unknown" descriptors. Currently, the decoder will skip the BUFR message (not generate BUFR output) if an extra unknown descriptor is detected.

To be implemented on May 1 at 1130Z.

D. Partners presentation/discussion

II. New Business

- Scheduled RFCs (Approve/Reject/Defer)
- Discuss RFCs rejected by the CM staff

III. Old Business

- Verify Completion of Previously Scheduled RFCs
- Deferred Items

IV. <u>Announcements/Reminders</u>

None

V. Next meeting – Thursday, 04 May 2017 @ 1:30 PM ET (1730Z)